

II. REMARKS

Claims 1-18 are pending. Claims 1 and 5 have been amended to replace the term “containing” with the term “having” to more particularly point out and clarify the claim.

1. Rejections under 35 U.S.C. § 112

A. Amended Claim 1 and Claim 5 are definite.

On page 2-3 of the Office Action, Claims 1 and 5 were rejected for indefiniteness of the heteroaryl term in the definition of R². To satisfy definiteness, an applicant “need only reasonably apprise those skilled in the art of the scope of the invention.” *Miles Laboratories v. Shandon, Inc.*, 27 USPQ2d 1123 (Fed. Cir. 1993). In Claims 1 and 5, Applicants have replaced the term ‘containing’ to more particularly point out and clarify the claims. Applicants submit that amended claims 1 and 5 are definite, because one skilled in the art will be able to determine the bounds of the term ‘heteroaryl’ from the C₅-C₆ monocyclic heteroaryl definition starting on page 6, line 32, and further from the set number and type of ring-member substitutions. The Office asserts that “even 1 to 3 hetero atoms, in any combination, is huge, and requires specific conception by the reader”. Even so, there are a finite number of ring structures that fit within the definition, and the bounds are clearly drawn. Further, breadth is not indefiniteness. *In re Robins*, 166 USPQ 552, 555 (C.C.P.A. 1970). Therefore, the fact that a genus is large does not preclude patentability. Thus, Applicants submit that the heteroaryl term in the definition of R² reasonably apprises those skilled in the art of the bounds of the invention, and Claims 1 and 5 are therefore definite.

2. Rejections under 37 C.F.R. 1.141(a)

A. Claim 4 and Claim 8 are proper dependant Markush claims

On page 2-4 of the Office Action, claims 4 and 8 are rejected as containing ultimate species.

The Rule in 37 CFR 1.141(a) states that:

Two or more independent and distinct inventions may not be claimed in one national application, except that more than one species of an invention, not to exceed a reasonable number, may be specifically claimed in different claims in

one national application, provided the application also includes an allowable claim generic to all the claimed species and all the claims to species in excess of one are written in dependant form or otherwise include all the limitations of the generic term.

In this case, both Claims 4 and 8 are dependant claims, and both contain proper Markush language. Therefore, they do not qualify as ultimate species.

The Office cites *In re Frissola* (22 USPQ 2d 1828) for the proposition that the Office can reject for Applicant's failure to follow a rule, in this case, a directive of Richard Wahl from August 10, 1969. While it is true that *In re Fissola* states that the PTO can prescribe requirements in the MPEP, it still requires that those requirements cannot be inconsistent with the statute, rules or cases law of the PTO's reviewing court, Applicants respectfully submit that the directive the Office cites from August 10, 1968, is inconsistent with the case law (United Sweetener USA, Inc. v. The Nutrasweet Company, 19 USPQ 2d 1561 and *In re Webber*, 198 USPQ 328) and the current requirements set forth in the MPEP (MPEP 803.02 provides that the Office should not refuse to examine that which the Applicant regards as his invention unless a lack of unity of invention argument can be made, and even then, if the claim is a Markush-type claim, the Office is to only require a provisional election of a single species for examination on the merits).

Therefore, Applicants submit that the Office is requiring restriction beyond what the MPEP or case law requires.

3. Rejection under 35 U.S.C. § 103

A. Claims 1,2,5, and 6 are non-obvious

The Office has asserted that the proviso statement in Claims 1,2,5 and 6 creates an obviousness argument. Applicants submit that they have supplied the Office with the relevant art known to Applicants, and that the Office has not made a *prima facie* case for obviousness.

4. Rejection under 35 U.S.C. § 101

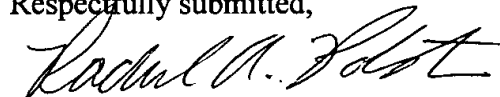
A. Claim 9 has real world utility

The Office has asserted that Claim 9 “does not relate to the real world of commerce”. Applicants respectfully submit that the Office has not presented a *prima facie* case for lack of a “real world” utility. MPEP 2107 contrasts the situation where an applicant merely indicates that a compound may be useful in treating unspecified disorders with “the situation where applicant discloses a specific biological activity” (in this instance, the inhibition of the alphav-beta3 integrin) “and reasonably correlates that activity to a disease condition” (in this instance, the specification provides that avb3 plays a role in various conditions or disease states including tumor metastasis, solid tumor growth (neoplasia), osteoporosis, Paget’s disease, humoral hypercalcemia of malignancy, angiogenesis, including tumor angiogenesis, retinopathy, including macular degeneration, arthritis, including rheumatoid arthritis, periodontal disease, psoriasis and smooth muscle migration (e.g., restenosis artherosclerosis), antivirals, antifungals, and antimicrobials). Literature supporting the correlation between the avb3 integrin and these disease states was further provided in the specification. Therefore, Applicants have provided a specific, credible real world utility for Claim 9.

In view of the foregoing remarks, it is respectfully submitted that all claims now active in the present application are in condition for allowance. Therefore, passage of the application and claims to issue is respectfully requested.

If the Office has any further comments or concerns, the Examiner is welcome to contact Applicants at the number below.

Respectfully submitted,



Rachel A. Polster

Registration No. 47,004

Phone: 314-274-7354

Pharmacia Corporation
Global Patent Department
P.O. Box 1027
St. Louis, MO 63006